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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	10/630,178	KANEKAR ET AL.
	Examiner	**Art Unit**	
	Sanjeev Malhotra	3694	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>29 July 2003</u>.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-20</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-20</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☒ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>See Continuation Sheet</u>.

4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____ .

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date : 09-16-2004; 09-22-2004 (two were filed); and 03-16-2005.

DETAILED ACTION

1.   This is the first Office Action in response to the application filed on July 29th, 2003 and titled: "Generating Accounting Data based on Access Control List Entries".

Specification Objections

2.   The Specification is objected to because of the following informalities described below. This is just an example of corrections needed and applicant's cooperation is requested in correcting similar omissions and errors. See MPEP §608.01 & §608.01(a).

Appropriate correction is required.

(a)   Bottom of page 31, line 28, the currently recited phrase "..... can be one" is missing word(s) after "one". Examiner notes that on top of page 32, line 1, it starts with something else with the opening of a parenthesis/ bracket and does not match with the ending phrase on page 31.

(b)   The definition of the phrase "accounting data" is missing in the Specification. Examiner notes that upon doing search of the Specification, other than in the title on cover page and page 1 of the Specification, the phrase "accounting data" is recited only once more on page 1, line 13, as in "..... generating accounting data based on .....".

(c)   The Specification needs to be updated with respect to its first paragraph for 'Cross-Reference to Related Applications' with patents already issued to the claimed priority application and its many continuation applications --- which were not identified initially, even though these were filed on the same day as the current application.

Appropriate corrections are required by the Applicant.

Claim Objections

3.   Claims 3, 7, 8, 12, 15, 18, 19 and their dependent claims are objected to because of the following informalities:

- Claim 3 on page 41, line 15, the word "identify" as currently recited should be replaced by "identifies" as in "..... number identifies a set .....".

- Claim 7 on page 42, line 12, the word "identify" as currently recited should be replaced by "identifies" as in "..... number identifies a set .....".

- Claim 8 on page 42, line 16, the word "identify" as currently recited should be replaced by "identifies" as in "..... number identifies a set .....".

- Claim 12 on page 43, line 12, the word "generate" as currently recited should be replaced by "generated" as in "wherein the lookup word generated identifies at least .....".

- Claim 12 on page 43, line 14, the word "identify" as currently recited should be replaced by "identifies" as in "..... number identifies a set .....".

- Claim 15 on page 44, line 5, the word "identify" as currently recited should be replaced by "identifies" as in "..... number identifies a set .....".

- Claim 18 on page 44, line 17, the word "identify" as currently recited should be replaced by "identifies" as in "..... number identifies a set .....".

- Claim 19 on page 45, line 3, the word "identify" as currently recited should be replaced by "identifies" as in "..... number identifies a set .....".

Appropriate correction is required.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees.   A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-20, and more particularly 1-4, 5-7, 8-9, 10-12, 13-15, 16-18, and 19-20, are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-20, and more particularly over claims 1 & 12, 2 & 3, 2 & 3, 13 & 18-20, 1 & 12, 13 & 18-20, and 13 & 18-20, respectively, of the U.S. Patent No. 7,177,978. Although the conflicting claims are not identical, they are not patentably distinct from each other, because the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent. Additionally, subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter and there is no

apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

Examiner notes that the limitations/steps of the claims in both documents, the patent and instant application, are almost identical and that part of their preambles, even though different, can result in the same preamble language by exchanging words, for example, but not limited to, in Claim 1 of both documents, by exchanging "identifying a merged lookup result" of the patent issued already with "generating accounting data" of the instant application, the preamble language would also become the same.

Claim Rejections - 35 USC § 112

4.   The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-20 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. The phrase "accounting data" is critical or essential to the practice of the invention, but not included in the claim(s), is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). The phrase "accounting data" is critical or essential to the practice of the invention as it is currently recited in the preamble of all the seven independent claims, and the term/word

"accounting" is a noun as recited by the Applicant in the instant application that is also critical or essential as currently recited in many of the dependent claims or limitations/ steps of the seven independent claims. Examiner notes that since "accounting data" has not been defined by the Applicant in the instant application, the Examiner looked up the meanings of term/word "accounting", which has been well-known and it generally refers to "financial accounting" that has been known since "circa 1716" per the Merriam-Webster Dictionary (see two pages attached herewith for its definition and use), and another type of "accounting", known as "cost accounting", has been known since "circa 1913" (see two pages attached herewith for its definition and use), and that neither of these "accounting" types, as defined in aforesaid definition pages attached herewith, has been utilized in the claims or the specification herein by the Applicant.

Examiner notes that the specification can be used as a dictionary to learn the meaning of a term in the patent claim. *Toro Co. v. White Consol. Indus., Inc.*, 199 F.3d 1295, 1299, 53 USPQ2d 1065, 1067 (Fed. Cir. 1999) ("[W]ords in patent claims are given their ordinary meaning in the usage of the field of the invention, unless the text of the patent makes clear that a word was used with a special meaning."); *Renishaw PLC v. Marposs Societa" per Azioni*, 158 F.3d 1243, 1250, 48 USPQ2d 1117, 1122 (Fed. Cir. 1998) ("Where there are several common meanings for a claim term, the patent disclosure serves to point away from the improper meanings and toward the proper meanings."). See also MPEP § 2111.01.

5.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The phrase/term "accounting data" recited in the preamble of all the seven independent claims is an undefined term that renders these claims indefinite, and the term/word "accounting" is a noun as recited by the Applicant in the instant application is also critical or essential as currently recited in many of the dependent claims or limitations/ steps of the seven independent claims. Examiner notes that since "accounting data" has not been defined by the Applicant in the instant application, the Examiner looked up the meanings of term/ word "accounting", which has been well-known and it generally refers to "financial accounting" that has been known since "circa 1716" per the Merriam-Webster Dictionary (see two pages attached herewith for its definition and use), and another type of "accounting", known as "cost accounting", has been known since "circa 1913" (see two pages attached herewith for its definition and use), and that neither of these two "accounting" types, as defined in aforesaid definition pages attached herewith, has been utilized in the claims or the specification herein by the Applicant.

Examiner notes that the specification can be used as a dictionary to learn the meaning of a term in the patent claim. *Toro Co. v. White Consol. Indus., Inc.*, 199 F.3d 1295, 1299, 53 USPQ2d 1065, 1067 (Fed. Cir. 1999) ("[W]ords in patent claims are given their ordinary meaning in the usage of the field of the invention, unless the text of the patent makes clear that a word was used with a special meaning."); *Renishaw PLC*

v. Marposs Societa" per Azioni, 158 F.3d 1243, 1250, 48 USPQ2d 1117, 1122 (Fed. Cir.

1998) ("Where there are several common meanings for a claim term, the patent

disclosure serves to point away from the improper meanings and toward the proper

meanings."). See also MPEP § 2111.01.

Claim Rejections - 35 USC § 103

6.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-20, as best understood by the Examiner, are rejected under 35

U.S.C. 103(a) as being unpatentable over US Patent No. 5,951,651 issued to

Lakshman et al. filed on July 23, 1997 and titled: "Packet Filter System using Bitmap

Vector of Filter Rules for Routing Packet Through Network" (hereinafter 'Lakshman') in

view of US Patent No. 6,831,893 issued to Ben Nun et al. filed on April 3, 2000 and

titled: "Apparatus and Method for Wire-Speed Classification and Pre-processing of

Data Packets in a Full Duplex Network" (hereinafter 'Ben Nun').

With respect to <u>Claim 1</u>, Lakshman teaches "A method for generating accounting data,

the method comprising:

identifying an access control list including a plurality of access control list entries, a

subset of the plurality of access control list entries identifying accounting requests;

associating accounting mechanisms with each of said access control list entries in

the subset of the plurality of access control list entries identifying accounting requests;

identifying an item;

identifying a particular one of said accounting mechanism corresponding to the item;

and updating said accounting mechanism corresponding to the item."

(see Lakshman Background and Summary, and FIGs. 3 to 8 and their text)

Examiner notes that per the teachings of Lakshman, the following similarity is seen to

the claimed invention, even though it may not be a one-to-one correspondence exactly

in all scenarios: each dimension, k = 1, 2, 3, ..., n is the same as a plurality of

claimed access control list entries; filters f_1, ..., f_m is the same as claimed accounting

requests; filtering rules r_1, ..., r_n is the same as claimed accounting mechanisms; and

each window partition array, w_1, ..., w_n is the same as claimed item. Based on these

similarities, Lakshman teaches 'updating' in C4, ~L44-47 as the updating of rules

(accounting mechanisms) very often.

Should the Applicant argue against the 'updating' teachings of Lakshman on the basis
of its yet to be defined 'accounting mechanism', then the Examiner notes that per
Lakshman's teachings as disclosed above, it does not explicitly teach 'updating said
accounting mechanism corresponding to the item', and Ben Nun teaches it as outputting
(or updating) of the "corresponding flow information to the data path unit".   (see
Ben Nun, C10, ~L22-60)

It would have been obvious to an ordinary person of skill in the art at the time invention
was made to modify the teachings of Lakshman with those of Ben Nun about such
updating. The motivation to combine these references would be to provide a quick
method and apparatus for speedy processing of data packets transmitted on a network
that can allow the equipment and process to be more productive and efficient in
processing and transmitting these data packets on any type of a communication
network, including the Internet, and thus enhance the throughput of the system.

With respect to Claim 2, Lakshman teaches "wherein the item corresponds to one or more fields of a received packet."   (see Lakshman Background and Summary, and FIGs. 3 to 8 and their text)

With respect to Claim 3, Lakshman teaches "wherein the item further includes at least one autonomous system number, said at least one autonomous system number identify a set of communication devices under a single administrative authority."   (see Lakshman Background and Summary, and FIGs. 3 to 8 and their text)

With respect to Claim 4, Lakshman teaches "wherein at least one of said accounting mechanisms is associated with at least two different access control list entries in the subset of the plurality of access control list entries identifying accounting requests." (see Lakshman Background and Summary, and FIGs. 3 to 8 and their text)

With respect to Claim 5, Lakshman teaches "A method for generating accounting data, the method comprising: identifying a lookup value;
performing a lookup operation in an associative memory based on the lookup value to identify an associative memory result;
performing a lookup operation on an adjunct memory based on the associative memory result to identify a counter indication, wherein at least two entries within the adjunct memory include a same counter indication;   and

updating one of a plurality of counters based on the counter indication."   (see

Lakshman Background and Summary, and FIGs. 3 to 8 and their text)

Lakshman teaches as disclosed above, but it does not explicitly teach 'updating', and
Ben Nun teaches it as 'output' or 'outputs' of various data.   (see Ben Nun,
Columns 9-12)

It would have been obvious to an ordinary person of skill in the art at the time invention
was made to modify the teachings of Lakshman with those of Ben Nun about updating.
The motivation to combine these references would be to provide a quick method and
apparatus for speedy processing of data packets transmitted on a network that can
allow the equipment and process to be more productive and efficient in processing and
transmitting these data packets on any type of a communication network, including the
Internet, and thus enhance the throughput of the system.

With respect to Claim 6, Lakshman teaches "wherein said at least two entries are

determined based on a corresponding specification in an access control list."   (see

Lakshman Background and Summary, and FIGs. 3 to 8 and their text)

With respect to Claim 7, Lakshman teaches "wherein the lookup value includes at least

one autonomous system number, said at least one autonomous system number identify

a set of communication devices under a single administrative authority."   (see

Lakshman Background and Summary, and FIGs. 3 to 8 and their text)

With respect to Claim 8, Lakshman teaches "A method for generating accounting data,

the method comprising:

identifying a lookup value, wherein the lookup value includes at least one autonomous

system number, said at least one autonomous system number identify a set of

communication devices under a single administrative authority;

performing a lookup operation in an associative memory based on the lookup value to

identify an associative memory result;

performing a lookup operation on an adjunct memory based on the associative memory

result to identify a counter indication; and

updating one of a plurality of counters based on the counter indication."   (see

Lakshman Background and Summary, and FIGs. 3 to 8 and their text)

Lakshman teaches as disclosed above, but it does not explicitly teach 'updating', and
Ben Nun teaches it as 'output' or 'outputs' of various data.   (see Ben Nun,
Columns 9-12)

It would have been obvious to an ordinary person of skill in the art at the time invention
was made to modify the teachings of Lakshman with those of Ben Nun about updating.
The motivation to combine these references would be to provide a quick method and
apparatus for speedy processing of data packets transmitted on a network that can
allow the equipment and process to be more productive and efficient in processing and
transmitting these data packets on any type of a communication network, including the
Internet, and thus enhance the throughput of the system.

With respect to Claim 9, Lakshman teaches "wherein said at least two entries are

determined based on a corresponding specification in an access control list."   (see

Lakshman Background and Summary, and FIGs. 3 to 8 and their text)

With respect to Claim 10, Lakshman teaches "An apparatus for generating accounting

data, the apparatus comprising:

a lookup word generation mechanism for identifying a lookup value;

an associative memory for generating an associative memory result based on the

lookup value;

an adjunct memory for generating a counter indication based on the associative

memory result, at least two entries of the adjunct memory configured to generate a

same counter indication value;   and

a plurality of counters for maintaining counts and for updating one of the plurality of

counters based on the counter indication."   (see Lakshman Background and

Summary, and FIGs. 3 to 8 and their text)

Lakshman teaches as disclosed above, but it does not explicitly teach 'updating', and
Ben Nun teaches it as 'output' or 'outputs' of various data.   (see Ben Nun,
Columns 9-12)

It would have been obvious to an ordinary person of skill in the art at the time invention
was made to modify the teachings of Lakshman with those of Ben Nun about updating.
The motivation to combine these references would be to provide a quick method and
apparatus for speedy processing of data packets transmitted on a network that can
allow the equipment and process to be more productive and efficient in processing and
transmitting these data packets on any type of a communication network, including the
Internet, and thus enhance the throughput of the system.

With respect to Claim 11, Lakshman teaches "wherein said at least two entries are

determined based on a corresponding specification in an access control list."   (see

Lakshman Background and Summary, and FIGs. 3 to 8 and their text)

With respect to Claim 12, Lakshman teaches "wherein the lookup word generate

identifies at least one autonomous system number, said at least one autonomous

system number identify a set of communication devices under a single administrative

authority;   and

wherein the lookup word includes said at least one autonomous system number."

(see Lakshman Background and Summary, and FIGs. 3 to 8 and their text)

With respect to Claim 13, Lakshman teaches "A computer-readable medium containing

computer-executable instructions for performing steps for generating accounting data,

said steps comprising:

identifying an access control list including a plurality of access control list entries, a

subset of the plurality of access control list entries identifying accounting requests;

associating accounting mechanisms with each of said access control list entries in the

Subset of the plurality of access control list entries identifying accounting requests;

identifying an item;

identifying a particular one of said accounting mechanism corresponding to the item;

and   updating said accounting mechanism corresponding to the item."

(see Lakshman Background and Summary, and FIGs. 3 to 8 and their text)

Lakshman teaches as disclosed above, but it does not explicitly teach 'updating', and
Ben Nun teaches it as 'output' or 'outputs' of various data.   (see Ben Nun;
Columns 9-12)

It would have been obvious to an ordinary person of skill in the art at the time invention
was made to modify the teachings of Lakshman with those of Ben Nun about updating.
The motivation to combine these references would be to provide a quick method and
apparatus for speedy processing of data packets transmitted on a network that can
allow the equipment and process to be more productive and efficient in processing and
transmitting these data packets on any type of a communication network, including the
Internet, and thus enhance the throughput of the system.

With respect to <u>Claim 14</u>, Lakshman teaches "wherein the item corresponds to one or more fields of a received packet."   (see Lakshman Background and Summary, and FIGs. 3 to 8 and their text)

With respect to <u>Claim 15</u>, Lakshman teaches "wherein the item further includes at least one autonomous system number, said at least one autonomous system number identify a set of communication devices under a single administrative authority."   (see Lakshman Background and Summary, and FIGs. 3 to 8 and their text)

With respect to <u>Claim 16</u>, Lakshman teaches "An apparatus for generating accounting data, the apparatus comprising: means for identifying a lookup value;

means for performing a lookup operation in an associative memory based on the lookup value to identify an associative memory result;

means for performing a lookup operation on an adjunct memory based on the associative memory result to identify a counter indication, wherein at least two entries within the adjunct memory include a same counter indication;   and

means for updating one of a plurality of counters based on the counter indication."

(see Lakshman Background and Summary, and FIGs. 3 to 8 and their text)

Lakshman teaches as disclosed above, but it does not explicitly teach 'updating', and Ben Nun teaches it as 'output' or 'outputs' of various data.   (see Ben Nun, Columns 9-12)

It would have been obvious to an ordinary person of skill in the art at the time invention was made to modify the teachings of Lakshman with those of Ben Nun about updating. The motivation to combine these references would be to provide a quick method and

apparatus for speedy processing of data packets transmitted on a network that can allow the equipment and process to be more productive and efficient in processing and transmitting these data packets on any type of a communication network, including the Internet, and thus enhance the throughput of the system.

With respect to Claim 17, Lakshman teaches "wherein said at least two entries are determined based on a corresponding specification in an access control list."   (see Lakshman Background and Summary, and FIGs. 3 to 8 and their text)

With respect to Claim 18, Lakshman teaches "wherein the lookup value includes at least one autonomous system number, said at least one autonomous system number identify a set of communication devices under a single administrative authority."   (see Lakshman Background and Summary, and FIGs. 3 to 8 and their text)

With respect to Claim 19, Lakshman teaches "An apparatus for generating accounting data, the apparatus comprising: means for identifying a lookup value, wherein the lookup value includes at least one autonomous system number, said at least one autonomous system number identify a set of communication devices under a single administrative authority;

means for performing a lookup operation in an associative memory based on the lookup value to identify an associative memory result;

means for performing a lookup operation on an adjunct memory based on the associative memory result to identify a counter indication;   and

means for updating one of a plurality of counters based on the counter indication."

(see Lakshman Background and Summary, and FIGs. 3 to 8 and their text)

Lakshman teaches as disclosed above, but it does not explicitly teach 'updating', and Ben Nun teaches it as 'output' or 'outputs' of various data.   (see Ben Nun, Columns 9-12)

It would have been obvious to an ordinary person of skill in the art at the time invention was made to modify the teachings of Lakshman with those of Ben Nun about updating. The motivation to combine these references would be to provide a quick method and apparatus for speedy processing of data packets transmitted on a network that can allow the equipment and process to be more productive and efficient in processing and transmitting these data packets on any type of a communication network, including the Internet, and thus enhance the throughput of the system.

With respect to <u>Claim 20</u>, Lakshman teaches "wherein said at least two entries are

determined based on a corresponding specification in an access control list."   (see

Lakshman Background and Summary, and FIGs. 3 to 8 and their text)

Conclusion

7.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure is:

1. US Patent No. 6,970,462 issued to Andrew McRae and titled: "Method

   for High Speed Packet Classification" filed on April 24, 2000.

2. Pub. No. US 2002/ 0126672 filed by Chow et al. on January 10, 2001

   and titled: "Method and Apparatus for a Flexible and Reconfigurable

   Packet Classifier using Content Addressable Memory".

3. Pub. No. US 2001/ 0043614 filed by Viswanadham et al. on July 17, 1998 and titled: "Multi-Layer Switching Apparatus and Method".

4. Pub. No. US 2002/ 0150093 filed by Ott et al. claiming priority from August 16, 2000 and titled: "High-Performance Addressing and Routing of Data Packets with Semantically Descriptive Labels In a Computer Network".

5. US Patent No. 6,798,777 issued to Ferguson et al. and titled: "Filtering and Route Lookup in a Switching Device" filed on April 17, 2000.

6. US Patent No. 6,598,034 issued to Axel K. Kloth and titled: "Rule Based IP Data Processing" filed on September 21, 1999.

7. US Patent No. 6,580,712 issued to Jennings et al. and titled: "System for Controlling Look-ups in a Data Table in a Network Switch" filed on October 12, 1999.

8. US Patent No. 6,151,323 issued to O'Connell et al. and titled: "Method of Supporting Unknown Addresses in an Interface for Data Transmission in an Asynchronous Transfer Mode" filed on January 15, 1998.

9. US Patent No. 5,917,821 issued to Gobuyan et al. and titled: "Look-up Engine for Packet-Based Network" claiming priority from December 24, 1993.

10. US Patent No. 7,120,731 issued to Bhugra et al. and titled: "CAM-based Search Engines that Support Pipelined Multi-Database Search

Operations using Replacement Search Key Segments" claiming

priority from July 15, 2003.

11. Pub. No. US 2006/ 0039374 filed by Belz et al. claiming priority from

February 14, 2000 and titled: "Pipelined Packet Switching and

Queuing Architecture".

12. US Patent No. 7,227,842 issued to Ji et al. and titled: Fast IP

Classification with Configurable Processor" claiming priority from April

24, 2001.

13. US Patent No. 7,215,637 issued to Ferguson et al. and titled:

"Systems and Methods for Processing Packets" claiming priority from

April 17, 2000.

8.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Sanjeev Malhotra whose telephone number is 571-272-

7292. The examiner can normally be reached on Flexible schedule.

    If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, James P. Trammell can be reached on 571-272-6712. The fax phone

number for the organization where this application or proceeding is assigned is 571-

273-8300.

    Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

9.   Examiner's Note: Examiner has cited particular columns and line numbers in the

references as applied to the claims for the convenience of the applicant. Although the

specified citations are representative of the teachings in the art and are applied to the

specific limitations within the individual claim, other passages and figures may apply as

well. It is respectfully requested from the applicant, in preparing the responses, to fully

consider the references in entirety as potentially teaching all or part of the claimed

invention, as well as the context of the passage as taught by the prior art or disclosed

by the examiner.

SM
October 26, 2007

James P. Trammell, SPE
Supervisory Patent Examiner